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VACA VALLEY RADIO CLUB

VACAVILLE, CALIFORNIA

REPEATER REPEATER REPEATER REPEATER REPEATER REPEATER REPEATER REPEATER REPEATER

April 2012

President's Message-The Feedline

By Marcus Maclean, KI6WDX

It's that time of the year for the tax man, isn't it?

Well, here it is with winter hopefully dying away and spring is coming into full bloom and before it starts getting hot like it has done in past summers, now might be the time to check on them radio antennas, the coax cable and the related mounting hardware to make sure all is secure so that your time spent on the air isn't wasted away from poor antenna support and losing RF along the way up to the antenna feedpoint. Yours truly is hoping to get the second of many antennas mounted in the next 30 days or thereabouts with the next antenna to get up is my wire dipole as an inverted V mounting since my property isn't all that large to support a nice tower based beam. And besides, who is cash flush these days anyway? What we dream of and what we want versus what our monthly income dictates and what our property allows us is why the wire dipole is my next antenna project.

I just want to thank all of the club members who completed the survey and mailed it back. I'm hoping for 100% of them to be mailed back so that all of them can be gone through in order to look and see what our club can do for our club members and their guests in order to present more informative radio related information. Those members who included their comments about what they'd like to know of or see more about has been most helpful with this survey besides just checking the various boxes of the survey. How many of you are on the air each day, during the week or during the weekends not counting the weekly Net Control event?

Just a friendly reminder that on April 21st, the March of Dimes Walk-a-Thon will once again be held in the Pena Adobe park and I would like to see a good turnout of club members willing to help out with the communication that this event needs in order to be a safe and effective event. There will be a continental breakfast as well as lunch served. And on April 28th, the Valley of the Moon ARC will be holding their hamfest event in Sonoma of which a fox hunt is one of the events besides a swap meet held both indoors and outside. And there will a display of vehicles that support emergency communications.

The end of holding our regular monthly club meetings before the onslaught of the summer weather will soon be upon us all and I would like to know if the BBQ we held last year in June as our last meeting before summer is something that should be repeated or does anyone have a better idea as to where the last meeting should be held this year? Is doing a BBQ using the fire house pits something you would like to continue doing or is there someplace else you'd like to see the last meeting held at? I'm open to all suggestions!

As I've stated in previous newsletters, our club repeater that sits atop Mt. Vaca doesn't seem to see much radio talk on it as compared to other nearby radio repeaters that seem to be more active and despite the PAVE PAWS conditions, I still hear quite a bit of chatter on the UHF band from repeaters as far north as Redding, Chico and Yuba City to other stations in the Sierra foothills to other repeaters in both the Vacaville and Sacramento areas. How do I know this lack of radio chatter? Well, I have two radios sitting side-by-side of each other with one radio just a mono band model having just my RR frequencies programmed into it as well as the W6VVR repeater frequencies and my other radio is a dual band/dual receive VHF/UHF radio and both radios when turned on, are in the scan mode and while in the scan mode, if a repeater is activated, I can see what repeater it is. Any guess as to which repeater I never see being activated? Maybe the radio repeater "police" needs to come to your house and ask questions!

Perhaps before summer, a trip can be arranged to visit the repeater facility up on Mt Vaca? And with this Wednesday night club meeting, I will make sure that I have all of my presentation articles and equipment unlike what I forgot to bring for last month's meeting which made my doing a worthwhile presentation worthless. See you all there!

Until next month, be safe, be well and G.O.T.A.! 73!

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March Meeting Minutes

The meeting was called to order by club president Marcus Maclean KI6WDX at 7:15pm.

Reports: No reports. No club minutes were recorded from the previous monthly meeting. The Financial Secretary is out of town on Red Cross work.

Old Business: There was no old business.

New Business: No official new business but we had discussion about up coming events such as March of Dimes and Field Day. The March of Dimes event is typically supported by our club annually. This year the event will be held on Saturday, April 21 at Peňa Adobe Park. Details will be worked out at the April club meeting.

The meeting was adjourned at 845pm.

Around the Shack

By Jerry Olive, KD6WKY

My 2002 Dodge Intrepid finally reached a point where I said screw it, I'm getting rid of it. I had been keeping it for an extra car that my kids could use, but when it couldn't pass smog last week because of blue smoke supposedly seen from the exhaust by the technician I knew that car was going to try and chomp at my wallet yet again.

Either the rings or valve stem seals are causing oil to get into the cylinders of the 2.7L V6 engine with only 139,820 miles on it, regardless; it would cost big money to fix a car not worth anything. Damn it! I'll never buy an American car again. Never.

Before I can take the car to Pick N Pull to unload it for $500, I had to uninstall my Kenwood TM-G707A dual band radio from the vehicle. No way was I going to leave that radio in the car. I had it professionally installed several years ago over at Audio Experts on Davis Street. The transceiver was in the trunk with a Larson NMO mount and ¼ wave antenna on the trunk lip. The display, speaker, and microphone/keypad all were remotely mounted on the dashboard. The remote mounting was the reason I bought the radio in the first place and the display is about as big as you can find, even now which makes it easy to see without glasses.

Now I plan on installing the radio in my 2008 Honda Civic GX and continue using it. I guess I should have done this long ago, but it was never a priority. I have everything in a box in good order so installing it shouldn't be too difficult. I am installing a brand new Larson NMO mount and ¼ wave antenna since the old was is 10 years old and pretty oxidized being exposed to the elements for a decade and all. So if you want an old Larson NMO trunk lid mount and an old ¼ wave dual band antenna, let me know, I'll give them to you. If nobody wants them, I'll recycle them, no problem.

There is a DXpedition in the North Cook Islands run by a bunch of Europeans going on right now, call sign E51M on Manihiki Island. Website http://manihiki2012.de/ Since this group of islands is less than 4,000 miles from here and we have almost all water between Vacaville and Manihiki, the propagation on HF is excellent. Have worked them on every band they have been active on 8Øm through 1Øm both CW and SSB, usually on the first call. I know Tom N6AJR and Skip AF6HC have both worked this DXpedition on several bands as well. This is very easy DX and kind of fun since it is a DXpedition. The operators will converse with you if you have a question or two; they don't seem particularly busy all the time.

A few weeks ago the CQ Magazine WPX contest took place on SSB. I did not particularly want to spend any time on the contest but when I saw a couple of new countries pop up on the DX Cluster websites, I turned on my radio to work A73A and A71EM in Qatar and a third station V55V in Namibia on a new band. That's it, only three stations, but I submitted a log anyway.

After work one evening I worked Trinh Hau 3W2LI in Saigon, Vietnam on 2Øm SSB. We had a short conversation which was fun. I think this is the first actual Vietnamese operator I have ever worked. Although I have Vietnam in my log many times, it has always been from foreigners visiting Vietnam for work or vacation. I sent Mr. Hau a QSL card; it will be interesting to see what I get back.

I'm off to the International DX Convention in Visalia in a few weeks followed by a day trip to the Valley of the Moon gig in Sonoma the following Saturday with Marcus KI6WDX. I'll check out the vendors and let you know if I see anything interesting. I just hope the food at the Holiday Inn in Visalia is safe to eat this year. It's always an adventure. I'll be listening for you on the air. 73!

VACA VALLEY RADIO CLUB—2011 ELECTED OFFICERS

President: Marcus Maclean KI6WDX
Vice President: Chris Jones, KD7TQO
Secretary: Jerry Olive, KD6WKY
Treasurer: Bob Hewitt, K6HEW

BOARD OF DIRECTORS

Director: Skip Lawson, AF6HC
Director: Richard Craig, KJ6MIB
Director: Antonio Del Rio, N6ZGB
Director: Tom Christman KE6MDM

APPOINTED POSITIONS

Net Control Chairperson: Marcus Maclean KI6WDX
Activities Chairperson: Board of Directors
Newsletter Editor: Jerry Olive, KD6WKY
Newsletter Publisher & Distributor: Bob Hewitt, K6HEW

Google Declares "Morse Code Is Perfect" with New *Gmail Tap* Mail Program

04/01/2012

On April 1, Google announced that it has unveiled a new way to use its popular *Gmail* e-mail system. Called ***Gmail Tap***, it uses dots and dashes to form letters, a system of communicating that should be very familiar to radio amateurs. "Morse code is perfect," said *Gmail Tap* Engineer Mitch Fedenko. "It's just a dot and a dash. What's simpler than that?"

According to Google, *Gmail Tap* will let you tap without looking at your screen, replace the 26-key keyboard with two keys and double productivity by typing two e-mails at once.

"Technology is everywhere today," explained David Brook, Google Vice President for Communication Services in a video announcing *Gmail Tap*, "and everyone has a smart phone. Think about the size of [a smart phone]. It's only two inches, two-and-a-half inches, and we're trying to cram an entire 26-key keyboard into that space. It's time to think about 'How can we do this better?' using the technology that we have today. And that's where *Gmail Tap* comes in."

Gmail Tap replaces the default keyboard in the Gmail application with one that only has two buttons: One for a dot and one for a dash. Brook said that every single letter in the alphabet can be spelled out by using just these two characters.

The QWERTY keyboard -- invented in 1874 -- is still used today, largely unchanged. "In Morse code, every letter of the alphabet is represented by a simple pattern of dots and dashes, and once you know them, you can type without even looking at your screen," Brook said. "This makes it ideal for situations where you need to discreetly send e-mails, such as when you're on a date or in a meeting with your boss." [*Editor's note: If your boss knows Morse code, this option might not work for you.*]

When Google Software Engineer Reed Morse came to Brook with the idea of bringing Morse code back, Brook said he got "really excited." Morse claims that Samuel F.B. Morse -- the creator of Morse code -- was his "great-grandfather's grandfather's brother." Morse is also the Lead Engineer for *Gmail Tap*.

Benefits of *Gmail Tap* include a split-screen function, enabling you to send two messages at once, to two completely different recipients. "*Gmail Tap* multitasking, it's an improvement over speech," Brook said. "You can say two things with your fingers that your mouth can only say one of. People are going to be twice as productive, and people are going to be able to write e-mails anytime they want." A planned "ship-to-shore mode" will "activate your phone's flash to communicate with other power users across an ocean (of people)." Also planned for the future is the Double-Black Diamond mode that will "add a third, fourth and more keyboards for writing up to eight messages at once."

Gmail Tap Product Lead Todd Smith said that "you can tap it in the morning, you can tap it at night, you can tap it in the bathroom. It [takes] a dot and a dash to have a conversation with the entire world. It's great!"

Editor's note, part deux: The ARRL reminds everyone to keep in mind the date of Gmail Tap*'s release.*

Special Event Stations Planned for London 2012 Olympic and Paralympic Games

03/21/2012

Some special event call signs will be activated to celebrate the London 2012 Olympic and Paralympic Games: 2O12L from London, England and 2O12W from Barry, Wales. The **London 2012 Inspire program** has granted the Radio Society of Great Britain (**RSGB**) -- Great Britain's **IARU** Member-Society -- use of the "Inspire mark" for these stations. Both stations will be on-the-air for the duration of the Games, July 27-August 12. Organizers hope to make at least 80,000 contacts during the seven weeks that 2O12L and 2O12W are on the air.

The London station – **2O12L** -- will be active on 160-2 meters on all modes. The station is located at the historic **Eltham Palace** in Southeast London, in the London borough of Greenwich, one of the six "host boroughs" for the Games.

THE VVRC WELCOMES YOU

The Vaca Valley Radio Club has proudly served the Northern Solano County Area since 1988. We pride ourselves in providing a friendly place for radio amateurs to meet and improve their operating skills.

We participate in public service events throughout the year and are always ready to assist with communications during times of emergency.

Browse our website for more information about our club. If you have any questions please email us at w6vvr@vacavalleyradio.net or call 707-448-5665 for assistance.

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988 General Meetings: 2nd Wednesday of each month at 7:30 PM 420 Vine Street Fire Station.

Wheelchair accessible

Visit the Repeater online courtesy of Bob K6HEW at: vacavalleyradio.net

Club repeater in Vacaville:W6VVR 145.470 MHz(-) pl 127.3
The W6VVR net call is Tuesday evenings at 8pm on the club repeater. All are invited to participate in this weekly meeting on the air. 73!

Additional local repeaters
WV6F 224.2ØØ(-)
WV6F 44Ø.Ø25(+)
WV6F 44Ø.Ø25 – PL 127.3Hz

- The Welsh station -- **2O12W** -- will be active on 160 meters-23 cm on all modes, including SSTV and satellite, will be based on the **seafront esplanade** at Whitmore Beach, Barry Island, Vale of Glamorgan. The site is located just a few miles south west of Cardiff and the Millennium Stadium, home to the first football match that will open the Games in Wales.

"Amateur Radio operators everywhere will be able to share in the Olympic experience by making contact with the station and exchanging greetings messages with visitors and Games participants who visit the station," said **Project Echo** Publicity Officer John Warburton, G4IRN. "The team aims to make contact with as many of the Games participating countries as possible. Special QSL cards will be available to stations contacted. The project aims to leave a lasting legacy by encouraging visitors to learn more about radio communications and the social, career and recreational benefits that it brings. Of course, visiting hams will be made very welcome at the stations."

WEB PAGE UPDATE

The Vaca Valley Radio Club's web page has a new address. This address is in addition to the what is presently used. Both the new and old addresses will get you to the same web page.

The new address is "w6vvr.net". That's the whole address. There is no need to put "www" in front of it or "/" anything behind it. Just use "w6vvr.net" for the URL.

A new E-Mail address has also been created. It is w6vvr@w6vvr.net. Previous club E-Mail addresses will work for the immediate future, but they are being phased out. Messages addressed to the club's address will go to the web master and to other club members as well.

We are looking for pictures that we can post on the web site. If you have any club related pictures please send them to the web master at w6vvr@w6vvr.net

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FREE LUNCH (April 21)

The annual March of Dimes/Walk America/March for Babies will be held at Pena Adobe Park on Saturday, April 21, 2012. For several years, the Vaca Valley Radio Club has assisted in the Walk by providing communication between rest stops and Walk headquarters. We have also provided communications and in some cases, vehicles for patrolling the course looking for and assisting injured or tired Walkers.

If you can help with this event, you should get to Pena Adobe Park by about 7:30 AM. This will give you time to pick up your FREE T-Shirt and have a FREE continental breakfast. The event is usually over by about 11:00 and includes a FREE lunch.

The frequency for the event will be 147.510 MHz simplex. If you don't have a radio, one can probably be provided. Please give Bob Hewitt a call at 448-5665 if you can help.

Valley of the Moon ARC Hamfest

Saturday, April 28 from 8:00am to 12 Noon at the Sonoma Veterans Memorial Building, 126 First Street West (the town square), Sonoma, CA.

Admission is Free, Breakfast is $6.00 and proceeds will go to the sponsoring club general fund.

There will be a VE session for those interested in upgrading their license. Be sure to bring $14 exact change, a clear copy of your current license, and photo ID.

A variety of station demonstrations will be on display including but not limited to satellite communications, RTTY, PSK31, ATV, and APRS. There will also be an exhibit of vehicles that support emergency communications; the primary purpose of amateur radio.

There will be a Fox Hunt.

The Talk-in frequency is 145.350 MHz with a PL of 88.5 and a standard offset.

Several club members will be attending this annual hamfest. Ride sharing will be arranged at the April club meeting for those wishing to car pool.

An 80 MW final puts these hams at the top of the high-power list.

By Taylor Davidson, N4TD

Many of us who have an interest in Amateur Radio are also attracted to technology-based professions. It is therefore not surprising to find 17 hams working at the Spallation Neutron Source (SNS). The SNS is a particle accelerator-based neutron source located at Oak Ridge National Laboratory in Oak Ridge, Tennessee.

A partnership of six national laboratories, sponsored by the US Department of Energy Office of Basic Energy Sciences, developed this facility. Studies of the atomic structure of materials are the focus of SNS research. It is a user facility available to corporate, university and governmental researchers from around the world.

Spall What?

Spallation is a technical term for knocking pieces off something with something else. Remember that time you were swinging your baseball bat in the house and accidentally hit that statue Aunt Jenny gave your mom? Remember how the head went flying across the floor? Well, that's spallation.

At SNS, the process is a little more sophisticated. To create a neutron beam using spallation involves several steps. It starts with an ion source that produces negatively charged hydrogen ions consisting of a proton orbited by two electrons. The ions are injected into a linear accelerator, which raises them

to very high energies. They then leave the accelerator and pass through a foil, which strips off each ion's two electrons, converting it to a proton.

These protons pass into a ring where they accumulate in bunches. (The protons are the bat.) Each bunch of protons is released from the ring as a pulse (the swing). The high-energy proton pulses strike a heavy-metal target, which is a container of liquid mercury (the statue). The proton pulses slam into the mercury atoms and knock off neutrons (the head).

These spalled neutrons are moving pretty fast and need to be slowed down. To slow them, they are sent into a moderator like liquid hydrogen or methane. Once slowed down, the neutrons are guided to areas containing special instruments such as neutron detectors. Once there, neutrons of different energies are used in a wide variety of experiments.

Radio Research

There is a significant radio component to the Spallation Neutron Source. In the linear accelerator RF energy is applied to cavities, which are basically metal tubes, to grab and accelerate the ions. A series of these tubes cause the ion pulses to increase in velocity and energy as they travel down the accelerator. Ninety-one large klystron vacuum tubes generate the RF energy. Seven of these produce up to 2.5 MW each at 402.5 MHz. Another four klystrons provide up to 5 MW each at 805 MHz. The remaining 81 klystrons deliver up to 550 kW each to the cavities they drive. All these add up to a capability to deliver over 80 MW of RF power. That's 47 db above a full gallon!

What Does It Do?

The beam of neutrons is used to study the structure of different materials. This has applications in physics, chemistry, engineering, medicine and biology. A few examples of neutron studies are:

•Engineering: the changes in the crystal structure of spinning turbine blades as they heat.

•Chemistry: the development of synthetic fibers for clothing.

•Physics: high-temperature superconducting materials.

•Medicine: the structure of synthetic molecules that may lead to drugs that can target diseased areas of the body.

•Biology: Research on the molecular structure of proteins, which aids the understanding of neurological and genetic diseases.

PLEASE RENEW YOUR MEMBERSHIP

VACA VALLEY RADIO CLUB, INC.

MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely

Dues are delinquent January 1st

Name: _____ Call Sign_____
Street: _____
City: _____Zip: _____
Phone: (_____) _____-_____OK to Publish ?(_____)
License Class: _____ ARRL Member ?(_____)
E-Mail Address_____

FAMILY Member (Spouse or Children)

Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)
Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)
Name: _____ Call Sign_____
License Class: _____ARRL Member ?(_____)

MEMBER Dues---------- $20.00 _____
Each Family Member --- $ 2.00 _____
Student ---------- $ 5.00 _____
Repeater/Autopatch donation --- _____
Call/Name badge--------- $10.00 _____
Optional ARRL membership
ARRL dues ---------- $37.00 _____
Senior is 65 yr or older with one time proof on age.

Total ---------- _____
Paid by CASH: ____ Check #_____
DATE:_____

Mail to : Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143